

SMARDA, JAN

Treti doplnok k Mechum Slovenska. Bratislava, Vyd. Slovenskej akademie vied, 1955. 42 p. (Slovenska akademia vied. Sekcia 2. Prace. Seria biologicka, sv. 1, zo it 9) (Third supplement to Mechy Slovenska (Mosses of Slovakia). German and Russian summaries. bibl.)

SOURCE: East European Accessions list, (EEAL) Library of Congress, Vol. 5, No. 8, August 1956.

ROSENBERT, Mita; SMARDA, Jan

Comparison of certain properties of bacteriophages produced by
lysogenic bacteria and of bacteriophages from passages. Cesk.
biol. 4 no.8:449-456 Aug 55.

1. Ustav pro obecnou biologii lekarske fakulty university v
Brne.

(BACTERIOPHAGE,
of lysogenic bact. & their passages, comparison.)

ROSENBERG, Mita; SMARDA, Jan; JAKUBIK, Jaroslav

Production of certain types of bacteriophage by lysogenic strains of Staphylococcus aureus. Cesk. biol. 4 no.8:457-466 Aug 55.

1. Ustav pro obecnu biologii lekarske fakulty university v Brne.

(MICROCOCCUS PYOGENES,
bacteriophage of lysogenic strains.)

(BACTERIOPHAGE,
of Micrococcus pyogenes, lysogenic strains)

SMARDA, J.

Smarda, J. Elyna tyosuroides (Vill.) Fritsch in the High Tatra. p.65

Vol. 10, no. 1, 1955 BIOLOGIA Bratislava, Czechoslovakia

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 2
February, 1956

ŠARDA, J.

Vegetative cover of the bare erosions and tundra soils in the Tatra Mountains. p.5.
(BIOLOGICKE PRACE, Vol. 2, no. 8, 1956, Bratislava, Czechoslovakia.)

SO: Monthly List of East European Accessions (EFAL) LC, Vol. 6, no. 12, December 1957. Incl

SMARDA, J.

✓ 3546. Physical ultrafiltration of serum proteins as a model (for the study) of natural ultrafiltration processes. D. Wiedermann and J. Smarda *Schweiz. med. Wschr.*, 1956, 86, 930-931 (Inst. f. allg. und exp. Path. Masaryk-Univ., Brno, Czechoslovakia).—The *in vitro* production of protein-containing fluids resembling pathological body fluids by ultra filtration of human serum is described. Characteristic electrophoretic patterns may be obtained by careful selection of the pore size of the collodion membrane. (German)

G. W. CASBIRING

Med

2.

EXCERPTA MEDICA Sec.4 Vol.11/5 Microbiology, etc. May 1958

1290. INDUCTION OF BACTERIOPHAGES BY ULTRAVIOLET LIGHT IN A NATURALLY POLYLYSOGENIC STRAIN OF STAPHYLOCOCCUS AUREUS - Smarda J., Inst. of Gen. Biol., Med. Fac., Univ. of Brno - FOLIA BIOL. (Praha) 1957, 3/3 (160-169) Graphs 3

An attempt was made to resolve the problem of whether every cell of a polylysogenic strain produced both phages when lysed after induction by UV light, or whether certain cells always produce only one type. The work was carried out with a naturally polylysogenic strain LS 2 of Staphylococcus aureus. The experiments were arranged so that the bouillon cultures of LS 2 were irradiated by UV light in a quartz glass container; after certain exposures patterns were taken from the cultures, incubated and filtered through collodion membranes. The filtrates, after dilution, were tested on 2 indicator strains, CS 4 and CS 13, of M. pyogenes aureus, each of these strains detecting one of the phages produced by LS 2: F 4 and F 13. The quantitative relation of these 2 phages, the production of which could be greatly induced by UV, after increasing doses of irradiation was followed. In every normal culture of LS 2, the proportion of the titres of F 13 and F 4 was very nearly in the ratio of 3 : 1. In the course of induction in visible light, the number of plaque-forming particles of F 13 increased far more than that of F 4. The titre of F 13 increased by as much as 400 times, while that of F 4 at most 12 times with the same dose. The proportion of the titre of F 13 to that of F 4 then reached the ratio of 367:1, in one specimen. When irradiating the cultures of LS 2 in the dark, completely different results were obtained, which were due to the absence of photoreactivation effect of visible light: the titre of F 13 increased at most 6 times only while that of F 4 as much as 34 times. It is concluded that one phage was probably liberated by cells which did not produce the other phage simultaneously, although potentially every cell could produce both in a constant ratio.

Nermut - Brno

WIEDERHOLD, D.; SMARDA, J.

Permeability of the capillary wall to proteins, Cesk. fysiол. 6 no.2:
201-207 1957.

1. Ústav pro vascobecnou a experimentální patologii lékařské fakulty
university v Brně Ústav pro obecnou biologii lékařské fakulty uni-
versity v Brně.

(CAPILLARIES, physiology,

permeability to proteins (Cz))

(PROTEINS

capillary permeability (Cz))

WIEDERMANN, D.; SMARDA, J.

Notes on the Permeability of the Capillary Walls to Proteins. Physiol. bohém. 6 no.2:232-239 1957.

1. Institute of General and Experimental Pathology, Medical Faculty,
Brno University, Institute of General Biology, Medical Faculty,
Brno University.

(CAPILLARY PERMEABILITY
to proteins)

1951, 7

"Natural and artificial inocula of strains of Staphylococcus aureus."

ČESKOSLOVENSKÁ MIKROBIOLOGIE, Praha, Czechoslovakia, Vol. 3, no. 6, 1951

Monthly List of East Europe Accessions (EEAI), LC, Vol. 8, No. 6, Sept 59
Unclass

1958, 1959.

NOTES

1. J. J. A remarkable find of the lichens, Fulcraia fulgens and Squararia
lentiginosa in the Gris valley of Slovakia. p. 385.

Vol. 12, No. 5, 1958.

Monthly Index of East European Accessions (MEMA) 10, Vol. 7, No. 12, Dec. '58

WIND, J. WICKOWSKI, J

"Pteronotus ferrugineus (Carr.) Peers. in the High Tatras in Czechoslovakia."

BIOLOGIA, Bratislava, Czechoslovakia, Vol. 13, no. 6, 1958

Monthly List of East Europe Accessions (EEAI), LC, Vol. 8, No. 6, Sept 59
Unclas

SMARDA, J.

"A new place of occurrence of *Carex pediformis* C.A.M. in Slovakia."

BIOLOGIA, Slovenska akademia vied, Bratislava, Czechoslovakia, Vol. 13, No. 12, 1958.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959
Uncl.

SMARDA, J.

Incidence and manifestations of colicinogeny in strains of
Escherichia coli. J.hyg.epidem.,Praha 4 no.2:151-165 '60.

1. Department of General Biology, Medical Faculty, Masaryk
University, Brno.
(ESCHERICHIA COLI)

SMARDA, J.

The latent period after u.v. induction of phage and colicin synthesis. Folia microbiol 6 no.1:44-48 '60. (EEAI 10:5)

1. Department of Biology, Medical Faculty of the J.E. Purkyne University, Brno.

(BACTERIOPHAGE) (COLICINS) (ESCHERICHIA COLI)

SMARDA, Jan

Mosses growing on the mylonite substrata in the Tatra Mountains.
Biologia 15 no.3:193-207 '60. (EEAI 9:8)

1. Katedra botaniky Masarykovy university, Brno.
(SLOVAKIA--MOSES)
(MYLONITE)

SMARDA, Jan

A relict plant community with prevalent *Carex paniculata* in the western part of the Tatra Mountains. *Biologia* 15 no.5: ~~344~~-353 '60.
(EEAI 9:11)

1. Katedra botaniky, Masarykovy university, Brno.
(SLOVAKIA--CAREX PANICULATA)

SMARDA, Jan

Notes on the floristic research in the Tatra Mountain area.
Biologia 15 no.10:779-784 '60. (KAI 10:5)

1. Katedra botaniky Masarykovy university v Brne.
(CZECHOSLOVAKIA--FLORA) (TATRA MOUNTAINS)

SMARDA, Jan

Problems concerning studies of the biology of species, ecology,
and phytocoenology. Biologia 15 no.10:797-798 '60. (EAI 10:5)

1. Katedra botaniky Masarykovy university v Brne.
(BOTANY)

SMARDA, J.

Determination of lysogenic properties of human strains of *Escherichia coli*. *Folia microbiol* 6 no.4:225-230 '61.

1. Department of General Biology, Medical Faculty of J.E. Purkyne University, Brno.

(BACTERIA)

SMARDA, Jan

Lichens on granite blocks in the Tatra Mountains. Biologia 16 no.3:
216-217 '61. (EEAI 10:9/10)

1. Geobotanicka laborator Ceskoslovenske akademie ved, potocka v
Brne.

(LICHENS)

SMARDA, Jan, doc., dr.

Warm-loving plants in the upper run of Cierna Voda bellow the Skalné
Vrata in the Belanske Tatra Mountains. Biologia 16 no.8:601-602 '61.

1. Geobotanicka laborator Ceskoslovenske akademie ved, Brno, Stara 18.

(PLANTS)

SMARDA, J.; VREBA, M.

The microscopic picture of cells and penicillin-induced spheroplasts of *Escherichia coli* exposed to the action of colicin. *Folia microbiol* 7 no.2:104-108 '62.

1. Department of Biology, Medical Faculty, Purkyne University, Brno.

(*ESCHERICHIA COLI* pharmacol)
(ANTIBIOTICS pharmacol)
(PENICILLIN pharmacol)

SKYBOVA, Marta; SMARDA, Jan

A survey of the flora in the Branna River Basin in Hruby
Jesenik Mountains. Prir cas slezsky 23 no.2:193-206 '62.

SMARDA, J.

Lysogeny and Bacteriocinogeny. Folia microbiol. 8 no. 4:254-263 J1 '63

1. Department of Biology, Faculty of Medicine, Purkyne University, Brno.
(BACTERIOPHAGE) (ANTIBIOTICS) (ESCHERICHIA COLI)
(GENETICS) (BACTERIA)

SHARP, J.

Microscopic picture of lysozyme and glycine spheroplasts of
Escherichia coli exposed to colicin. *Folia microbiol. (Praha)*
10 no.3:179-181 My'65.

1. Department of Biology, Faculty of Medicine, Purkyne University,
Brno.

Polina, M.

Contribution to the typing of *colibac*. Mor. med. fac. red.
Brnensis 38 no.4:157-167 1965.

1. Katedra obecné biologie lékařské fakulty University J.E.
Purkyně, Brno (vedoucí prof. MDr. Sc. Otmar Necas).

EAST GERMANY/CZECHOSLOVAKIA

SMARDA, J., Biological Institute of the Medical Faculty, J.E. Purkyne University, Brno, Czechoslovakia (Original-language version not given).

"An Inhibitor of Colicin G Produced by *Proteus Mirabilis*"

Berlin, Zeitschrift fuer Allgemeine Mikrobiologie, Vol 6, No 4, 1966; pp 339-340.

Abstract: A substance is described which occurs in the cell-free filtrate of the culture and inactivates certain colicins in a type-specific manner. Many of the properties of this substance (especially its considerable resistance to heat, in addition to its type-specificity) indicate that it is a type of cell-free colicin receptor, though the possibility that it is a specific protease is not totally excluded. 4 References, 2 of which East German, 1 Belgian and 1 American. (Manuscript received 24 Feb 66).

1/1

- 29 -

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S/078/61/006/012/003/011
B110/B147

AUTHORS: Bol'shakov, K. A., Fedorov, P. I., Smarina, Ye. I.,
Smirnova, I. N.

TITLE: Study of the common solubility of magnesium and gallium in
aluminum

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 12, 1961, 2727-2731

TEXT: The authors studied the ternary system aluminum - magnesium - gallium, and examined the common solubility of magnesium and gallium in aluminum at 290, 240, and 20°C. The alloys were molten from 99.6 and 99.9% Al, 99.91% Mg, and 99.97% Ga with a flux consisting of 46% of $MgCl_2$, 35% of KCl, 8% of $CaCl_2 + NaCl$, and 11% of $BaCl_2$. For 14 days to 3 months, the samples were annealed in evacuated glass ampuls and tempered in water. The common solubility was determined by microstructural analysis (etching agent: 2.5% HNO_3 ; 2.0% NaOH) and by determination of hardness according to Vicker (diamond pyramid, load: 10 kg). When the equilibrium limit of
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Study of the common solubility of ...

homogeneity is reached, separations in the second phase increase, whereas the content of incidental impurities in phase transition remains unchanged. Microstructural studies showed the following phase regions: (1) that of the homogeneous aluminum-base solid solution, α_{Al} ; (2) two-phase regions:

$\alpha + \beta$, $\alpha + \gamma$, $\alpha + \text{Mg}_2\text{Ga}$, $\alpha + \text{MgGa}_2$, $\alpha + \text{Ga}$; (3) three-phase regions:

$\alpha + \beta + \gamma$; $\alpha + \gamma + \text{Mg}_2\text{Ga}$; $\alpha + \text{Mg}_2\text{Ga} + \text{MgGa}$. The solid aluminum-base solution was found by alkaline etching, the β -phase (slightly yellow) and γ -phase (black) were found by weak HNO_3 (2.5%). Mg_2Ga and MgGa phases were

found by alkaline etching. Transitions from homogeneous into binary and ternary and from binary into ternary regions were characterized by salient points in the composition - hardness curves. This is in good agreement with data obtained by microstructural analysis. In the region of low Ga additions ($\leq 1\%$ by weight), the common solubility of Mg and Ga first increases at all temperatures, and then slightly drops again. It increases rapidly when the Al - Ga side is approached. There are 8 figures and 10 references: 1 Soviet and 9 non-Soviet. The two references to English-language publications read as follows: M. Hansen. Constitution of binary alloys, 1959, 105; I. Clare. J. Inst. Metals, 96, 43 (1958)
Card 2/02

Equilibrium in the Mg-rich part...

S/078/62/007/003/010/019
B110/B138

4 : 1) were examined, and one passing through the points of the compounds Al_3Mg_4 and Mg_5Ga_2 . In sample 1:9, the constitution diagram consists of the primary crystallization lines of the δ -solid solution on Mg base and primary precipitation of the γ -phase with a flat peak at 460°C. The two lines intersect at 67.5% of Mg and 435°C. A wide δ - γ two-phase range exists in the solid state. A homogeneous zone of the γ -phase is believed to exist at 50-57% weight Mg. In ratio 1 : 4, the liquidus consists of the precipitation lines of the δ -solid solution and the γ -phase which intersect at 66.5 wt % Mg and 425°C. The maximum of the γ -phase liquidus curve falls to 454°C. In the δ + γ + Mg_5Ga_2 three-phase range (ternary eutectic at 360°C) and δ + γ two-phase range sections it was found that in ratio 2 : 3 the δ + γ range was remarkably narrow in the solid state. In ratio 3 : 2 the liquidus line corresponded to the crystallization of the δ -solid solution and the γ -phase. In the δ + Mg_5Ga_2 range, in ratio 4 : 1 the liquidus consists of the line of primary precipitation of the solid solution on Mg base, and of the binary Mg_5Ga_2 compound. The intersection point was at 57.5 wt % Mg and 405°C. The section δ + γ + Mg_5Ga_2 and δ + Mg_5Ga_2 was taken. Since the Al_3Mg_4 - Mg_5Ga_2 section

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Equilibrium in the Mg-rich part...

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B110/B138

intersects the radical cuts proceeding from the Mg vertex of the triangle (Fig. 2), its examination complements that of the remaining sections. The diagram (Fig. 3, 7) is quasibinary (eutectic at 388°C). The microhardness of the six samples was 293 - 307 kg/mm², and that of the Mg₅Ga₂ phase 242 - 256 kg/mm². The Al₃Mg₄ - Mg₅Ga₂ section in the Mg-Al-Ga system is quasibinary and cuts off the triangle Mg-Al₃Mg₄-Mg₅Ga₂ representing an elementary ternary system. The crystallization field of the solid solution on Mg base, lying on the liquidus surface of this system, is adjacent to the crystallization fields of the γ -phase of Al-Mg and of Mg₅Ga₂ of Mg-Ga. The lines of the monovariant equilibrium E₁E, E₂E, E₃E correspond to the reactions $liq \rightleftharpoons \delta + \gamma$, $liq \rightleftharpoons \delta + Mg_5Ga_2$, $liq \rightleftharpoons \gamma + Mg_5Ga_2$. The point of equilibrium was found at 62 wt % Mg, 26 wt % Ga, 13 weight % Al, and 380°C. Combined solubility, showed a decrease from 9.5 (Al + Ga) at 340°C to 4 wt % at 20°C. K. I. Marinina is thanked for assistance in the experiments. There are 7 figures and 11 references: 1 Soviet and 10 non-Soviet. The three references to English-language publications read as follows: M. Hansen. Constitution of binary alloys, 1958, p. 105. V. Hume-Rothery, G. Raynor. J. Card 3/5

L 10653-63

EWI(q)/EWI(m)/BDS--AFFTC/ASD---JD

ACCESSION NR: AP3001219

S/0078/63/008/006/1412/1418

56

AUTHOR: Bol'shakov, K. A.; Fedorov, P. I.; Smarina, Ye. I.

TITLE: Beta prime phase of aluminum-magnesium system.

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 6, 1963, 1412-1418

TOPIC TAGS: aluminum, magnesium, microhardness, interplanar distances, Ga, In, Tl

ABSTRACT: The section of the Al-Mg diagram between 35-50 wt. % Mg was investigated. The Beta prime phase was formed by cooling melts containing 40-43 wt. % Mg at about 2.5 degrees per minute; more rapid cooling gave Gamma and Gamma + Beta phases; cooling at 0.5 degrees per minute crystallized the Beta + Gamma phases in a eutectic environment. Microhardness and interplanar distances were measured in poured samples (41-41.5% Mg, Beta prime phase) prepared under incomplete annealing. A study of the possibility of stabilizing the Beta prime phase in crystallization from the melt by addition of Ga, In or Tl showed that only Ga stabilized effectively. "In conclusion, we thank Ye. S. Makarov for help and consultation in conducting the X-ray investigations. Orig. art. has: 4 tables and 4 figures.

ASSOCIATION: none

Card 1/p1

L 8834-65 ENT(m)/EPR/ENP(q)/ENP(b) Ps-4 ASD(m)-3/AS(mp)-2 JD

S/0078/64/009/008/1883/1897 ^B

ACCESSION NR: AP4043575

AUTHOR: Bol'shakov, K. A.; Fedorov, P. I.; Smirina, Ya. I.; Smirnova, I. N.

TITLE: The Al-Mg-Ga system

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 8, 1964, 1883-1897

TOPIC TAGS: aluminum magnesium gallium system, ternary alloy, alloy phase diagram, alloy phase structure

ABSTRACT: Alloys of the Al-Mg-Ga system in the as-cast, quenched, and annealed conditions were investigated by thermal analysis and x-ray diffraction pattern examination. The compositions of investigated alloys melted from 99.6 or 99.9% pure Al, 99.9% pure Mg, and 99.97% pure Ga were along the sections parallel to the Al-Mg side of the concentration triangle and had a constant Ga content of 5, 10, 15, 20, 25, 30, and 35 wt%. In addition, Al-Mg₅Ga₂, Mg₅Ga₂-36% Mg, 66% Al sections, and a section with a constant 25 wt% Mg content were investigated. On the basis of the obtained results, phase diagrams of the Al-Mg-Ga system and investigated sections, and the isotherms at

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300 and 20C were plotted (see Fig. 1 of the Enclosure). In the Al-Mg-Ga phase diagram a ternary intermetallic phase, Z, which forms an extensive region of solid solutions and can be regarded as a bertholide-type phase, was identified. The structure of the Z phase is highly similar to the structure of the δ phase obtained under conditions of incomplete annealing of the Al-Mg system. At the temperature of the liquids' surface, the Al-Mg-Ga diagram is characterized by the absence of strictly binary sections and by the presence of quasi-binary sections. In solid condition, however, two-phase regions are clearly distinguishable between adjacent single-phase regions. Orig. art. has: 13 figures and 1 table.

ASSOCIATION: none

SUBMITTED 29 May 63

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Card 2/3

L 8834-65

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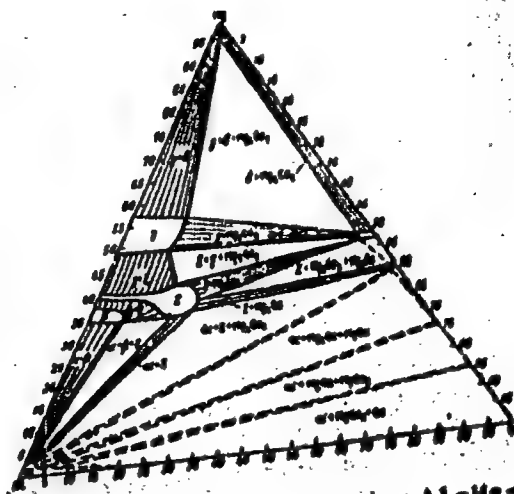


Fig. 1. Phase distribution in the Al-Hg-Ga system at 20°C

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ACCESSION NR AM4047287

BOOK EXPLOITATION

16
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Smarnov, Vladimir Ivanovich; Lebedev, Nikolay Andreyevich

Constructive theory of ¹⁶functions of the complex variable (Konstruktivnaya teoriya funktsiy kompleksnogo peremennogo), Moscow, Izd-vo "Nauka", 1964, 438 p.
biblio., indices. 7,500 copies printed.

TOPIC TAGS: function, mathematics, polynomial, complex variable

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2. - 1/2

L 47725-65

ACCESSION NR AM1047287

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cord 2/2

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From: [illegible] of the [illegible] [illegible]. Vest. sto-rin. 14, No. 5, 1952.

From: List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.

1. World's Little Geographic Atlas; a criticism. p. 265 (Geodezia es Kartografia Vol. 3, no. 1, 1957, independent)

10. Monthly List of East European Accession (1941) LC, Vol. 6, no. 7, July 1957. Uncl.

SMAROGLAY, Ferenc, Dr.

"Geography of Hungary" by Dr. Marton Pecsí Bela Sarfalvi. Reviewed
by Ferenc Smaroglay. Foldr kozl 9 no.1:88-91 '61.

MIKLOS, Gyula; SMAROGLAY, Ferenc

The 13th itinerary meeting of the Hungarian Geographical Society; Gyula, September 19-21, 1959. Foldr kszl 8 no.1:101-109 '60.

1. Fovarosi Pedagogiai Szeminarium tanszekvezeto tanara, Budapest (for Smaroglay).

KAZAR, Leona; SMAROGLAY, Ferenc, dr.; TOTH, Aurel, dr., közepiskolai tanár

Report on the work of the Division of the Methodology of Teaching. Foldr közl 10 no.3:301-302 '62.

1. Magyar Foldrajzi Tarsasag Oktatasmódszertani Szakosztalyanak elnoke; Központi Pedagógus Továbbképző Intézet tanszékvezető tanára; "Foldrajzi Közlemények" szerkesztő bizottsági tagja (for Kazar). 2. Vezető szakfelügyelő; Magyar Foldrajzi Tarsasag Oktatasmódszertani Szakosztalyanak tarselnoke (for Smaroglay). 3. Szakfelügyelő; Magyar Foldrajzi Tarsasag Oktatasmódszertani Szakosztalyanak titkara (for Toth).

NOWAK, Jan; MARKIEWICZ, Marian; SMARSZ, Czeslaw

Bromsulphalein test. Polski tygod. lek. 11 no.43:1824-1827
22 Oct 56.

1. (Z I Kliniki Chorob Wewnetrznych A.M. w Poznaniu;
Kierownik: prof. dr. med. St. Kwasniewski) adres: Poznan,
1 Kl. Chor. Wewn A.M., ul. Długa 1/2.

(LIVER FUNCTION TESTS,

phenolphthalein clearance test (Pol))

(PHENOLPHTHALEIN DYES,

liver funct. tests (Pol))

SZERESZEWSKA, Halina; JASINSKI, Kazimierz; SMARSZ, Czeslaw

Hypopotassemia in nephrotic syndromes. Polskie arch. med. wewn. 31
no.3:413-420 '61.

1. Z I Kliniki Chorob Wewnętrznych A.M. w Poznaniu Kierownik: prof.
dr med. S. Kwasniewski.

(POTASSIUM blood) (NEPHROSIS blood)

SKALMOWSKI, Tadeusz; SMARSZ, Czeslaw

Electrolytes in the blood serum in children with water metabolism disorders in the acute stage of infectious hepatitis. Przegl. epidem. 16 no.2: 155-157 '62.

1. Z Oddziału Zakaznego Wojewodzkiego Szpitala Dziecięcego im. B. Kryśiewiczza w Poznaniu Dyrektor Szpitala: dr med. M. Stabrowski.
(HEPATITIS INFECTIOUS metab) (WATER ELECTROLYTE BALANCE)

SZERESZEWSKA, Halina; SMARSZ, Czeslaw

Serum lipoproteins in hypertonic disease. Polskie arch. med.
wewn. 26 no.1:55-66 1956.

1. Z I Kliniki Chorob Wewnętrznych A. M. w Poznaniu Kierownik:
Prof. dr. med. S. Kwasniewski I Klin. Chor. Wewn. A. m. W Poznaniu.
ul. Długa 1/2.

(LIPOPROTEINS, in blood
in hypertension. (Pol))
(HYPERTENSION, blood in
lipoproteins. (Pol))

JASINSKI, Kazimierz; RASZEJA, Bozena; SMARSZ, Czeslaw

Clinical value of determination of sodium paraaminohippurate and sodium thiosulfate clearance time. Polskie arch. med. wewn. 26 no. 8:1197-1199 1956.

(KIDNEY FUNCTION TESTS,

sodium p-aminohippurate & sodium thiosulfate clearance time tests (Pol))

(HIPPURATES, in blood,

sodium p-aminohippurate clearance time determ. in kidney funct. test (Pol))

(THIOSULFATES, in blood,

sodium thiosulfate clearance time determ. in kidney funct. test (Pol))

RASZEJA-WANIC, Bozena; JASINSKI, Kazimierz; SMARZ, Czeslaw

Therapeutic value of blood transfusion in kidney diseases.
Polskie arch. med. wewn. 26 no.8:1225-1233 1956.

1. Z I Kliniki Chorob Wewn. A.M. w Poznaniu. Kierownik: prof.
dr. med. S. Kwasniewski, Poznan, I Klinika Chor. Wewn. A.M.
(KIDNEY DISEASES, therapy,
blood transfusion (Pol))
(BLOOD TRANSFUSION, in various diseases,
kidney dis. (Pol))

MAZUROWA, Aleksandra; CHODERA, Leon; SMARSZ, Czeslaw

Modification of blood electrolytes in post-insulin slight hypoglycemic states and its effects on electrocardiographic curve. Polskie arch. med. wew. 26 no.9:1349-1364 1956.

1. Z I Kliniki Chorob Wewnętrznych A. M. Poznaniu, Kierownik: prof. dr. med. S. Kwasniewski, Adres autora: Poznan, ul. Długa 1/2.

(ELECTROLYTES, in blood,
in hyperinsulinism, eff. on ECG (Pol))
(HYPERINSULINISM, blood in,
electrolytes, eff. on ECG (Pol))
(ELECTROCARDIOGRAPHY,
eff. of blood electrolytes in hyperinsulinism (Pol))

CHODERA, Leon; MAZUROWA, Aleksandra; SMARSZ, Czeslaw

Studies on correlation between metabolic changes manifested by electrolytes and carbohydrates and electrocardiographic changes following adrenalin therapy. Polskie arch. med. wewn. 27 no.10: 1319-1333 1957.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Poznaniu Kierownik: prof. dr med. S. Kwasniewski. Adres autora: Poznan, ul. Długa 1/2 I. Klin. Chor. Wewn. A.M.

(EPINEPHRINE, effects,
on blood sugar, potassium & on ECG (Pol))
(BLOOD SUGAR, effect of drugs on,
epinephrine, relation to blood potassium & ECG (Pol))
(POTASSIUM, in blood,
eff. of epinephrine, relation to blood sugar & ECG (Pol))
(ELECTROCARDIOGRAPHY,
eff. of epinephrine, relation to blood sugar & potassium
(Pol))

RASZEJA-WANIC, Bozena; JASINSKI, Kazimierz; SMARSZ, Czeslaw

Clinical value of the determination of the thiosulfate space in disorders of water & mineral metabolism. Polskie arch. med. wewn. 28 no.4:504-505 1958.

1. Z I Kliniki Chorob Wewnętrznych A.M. w Poznaniu Kierownik: prof. dr med. S. Kwasniewski.

(BODY FLUID BALANCE,

disord., clin. value of determ. of extracellular thiosulfate space (Pol))

(THIOSULFATES, metab.

extracellular thiosulfate space, clin. value of determ. in water-electrolyte disord. (Pol))

MAZUROWA, Aleksandra; CHODERA, Leon; SMARSZ, Czeslaw

Effects of shifting of blood serum electrolytes on ECG curve during hypoglycemia and after adrenalin administration. Polskie arch. med. wewn. 28 no.4:541-543 1958.

1. Z I Kliniki Chorob Wewnętrznych A.M. w Poznaniu. Kierownik: prof. dr med. S. Kwasniewski:

(HYPOGLYCEMIA,

eff. on blood electrolytes & ECG (Pol))

(EPINEPHRINE, eff.

on ECG in relation to blood electrolytes (Pol))

(ELECTROCARDIOGRAPHY,

eff. of hypoglycemia & epinephrine admin. in relation to blood electrolytes (Pol))

(ELECTROLYTES, in blood

eff. of hypoglycemia & epinephrine admin. in relation to ECG (Pol))

CHODERA, Leon; MAZUROWA, Aleksandra; SMARSZ, Czeslaw

On the investigations on the relationships between metabolic, electrolytic and carbohydrate exchange and electrocardiographic changes in the so-called energy-dynamic cardiac insufficiency. III. Hypoglycemic states interrupted by adrenalin. Polskie arch.med.wewn. 29 no.5:581-587 '59.

1. Z I Kliniki Chorob Wewnętrznych A. M. w Poznaniu Kierownik:
prof. dr med. S. Kwasniewski.

(ELECTROCARDIOGRAPHY pharmacol)

(HYPERINSULINISM)

(EPINEPHRINE pharmacol)

(WATER ELECTROLYTE BALANCE)

JASINSKI, Kazimierz; RASZEJA-WANIC, Bozena; KUBACKI, Andrzej; SMARSZ,
Czeslaw

Effect of prolonged application of massive doses of cortisone on
the osseous system and certain biochemical and histological
changes in rabbits. Polska arch.med.wewn. 30 no.6:839-841 '60.

1. Z I Kliniki Chorob Wewnętrznych A.M. w Poznaniu Kierownik:
prof. dr med. S.Kwasniewski.
(CORTISONE pharmacol)
(BONE AND BONES pharmacol)

WEDNESDAY, April

[illegible]

Received 10/10/2011; accepted 10/10/2011; published 10/10/2011. This article is part of the Special Issue on "The Role of the Journal of Management Inquiry in the Field of Management Research."

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

273. ... Sovetskoye gosudarstvo V Tor'be In Obil'noe i skopleniya
... (M-vn' yash. Otrazheniya Sosh. In- Povysheniya
Kvalifitsatsii i razvitiya ... Gos. In-Tek. ... V.
... nosova). ...

... Zhurnal'nykh Stat' ...

SMARYSHEV, M.D. (Leningrad)

Approximate computation of concentration coefficients of
continuous compensated systems. Akust. zhur. 9 no.2:246-247
'63. (MIRA 16:4)

(Sound)

L 9949-65 EWT(1)/EEC-4/EEC(t)/EEC(b)-2/FCS(k) Pac-4/Pac-2/P1-4/PJ-4/P1-4
 SSD/AFETR/RAEM(a)/AFWL/ASD(a)-5/BSB/AFTC(b)/ESD(us)/ESD(t)/RAEM(t) NR
 ACCESSION NR: AP4045494 S/0109/64/009/009/1694/1696

AUTHOR: Smaryshev, M. D.

TITLE: Maximization of the directive gain of an antenna array 25B B

SOURCE: Radiotekhnika i elektronika, v. 9, no. 9, 1964, 1694-1696

TOPIC TAGS: antenna, antenna array, directive gain

ABSTRACT: As G. Gilbert and S. Morgan do not indicate in their article (Bell System Techn. J., 1955, 34, 3, 637) a permissible value of antenna sensitivity to random errors, their treatment of the problem does not provide a method for its rigorous solution. Hence, the author develops a new method of exciting the antenna which ensures a maximum mathematical expectation of the directive gain, with randomly applied excitation errors having a specified value. A formula for the mathematical expectation as an explicit function of excitation coefficients is developed, as well as a set of linear algebraic equations whose

Card 1/2

I. 9949-65

ACCESSION NR: AP4045494

0
solution produces the excitation coefficients ensuring the max directive gain.
Orig. art. has: 7 formulas.

ASSOCIATION: none

SUBMITTED: 09 Oct 63

ENCL: 00

SUB CODE: EC

NO REF SOV: 000

OTHER: 001

Card 2/2

L 31073-63 EWT(1)/EEC-4/EEC(t)/EEC(b)-2/FCS(k)

Pac-4/PI-4/PJ-4/PI-4/Peb NR

S/0046/65/011/001/0124/0125

ACCESSION NR: AP5006184

AUTHOR: Smaryshev, M. D. (Leningrad)

TITLE: The array factor of a continuous and transparent acoustical volume antenna

SOURCE: Akusticheskiy zhurnal, v. 11, no. 1, 1965, 124-125

TOPIC TAGS: acoustic antenna, antenna theory, antenna model

ABSTRACT: The author analyzes a hypothetical acoustical antenna array whose elements are confined to a space within the right circular cylinder. The aim of the analysis is to determine efficiency of the antenna as a function of the space it occupies. The antenna elements are considered to be similar and distributed symmetrically and evenly, with the distance between adjacent elements less than half the wavelength, i.e., the antenna can be considered continuous. The elements would be excited with phase differences producing constructive interference along the cylinder axis. The analysis consists in determining the optimal ratio of cylinder height to cylinder diameter and the ratio of both to the wavelength. The formulas used for this purpose show that the array factor is proportional to the height-diameter ratio and diminishes with increasing diameter and wavelength roughly according to a square law, the dependence being steeper at low values of the diameter-wavelength

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L 31073-65

ACCESSION NR: AP5006184

ratio. For instance, at a diameter-wavelength ratio of 0.5 and a height-wavelength ratio of 10, the concentration coefficient is 9 times larger than for a flat cylinder of the same cross section. The differences, however, are less with larger cross sections, since at a zero height-diameter ratio the concentration coefficient decreases only to its limit value of 0.5. The concentration coefficient, on the other hand, is also determined by the width of the directionality characteristic of the antenna at its first zero level. Since the directionality characteristics of the antenna under consideration depends on two directionality characteristics (that of a flat ring and that of the generatrix), its width will coincide with the steeper of the two. Here again, the characteristic in general grows steeper with a decreasing height-diameter ratio. The analysis explains the low concentration values of large cross sections of the acoustic antenna arrays. Orig. art. has: 2 figures. [FP]

ASSOCIATION: none

SUBMITTED: 04Sep63

ENCL: 00

SUB CODE: GP, EC

NO REF SOV: 000

OTHER: 000

ATD. PRESS: 3198

Card 2/2

SVASHEVSKIY, N.D.

Natural antivitamin of pantothenic acid. Nauch. dokl. vuz.
zhukoly; biol. nauki no.1:122-126 '66.

(MIRA 19:1)

1. Rekomendovana kafedroy botaniki Khabarovskogo pedagogicheskogo
instituta. Submitted October 20, 1964.

SMIRNOV, V. I.

"Oxygen Absorption Under Hypothermia Conditions," a paper from the book
Theses of the Reports of the Scientific Session of the Military Medical Academy
in. J. M. Kirov, Tezisy Dokladov Nauchnoy Sessii, 20 Oct-2 Nov 1956, Leningrad.

SALEK, Jan; REHAK, Frantisek; SMAT, Vuclov

Long-term investigations on surgical therapy of bronchogenic carcinoma. Sborn. lek. 61 no.4:107-115 Apr 59.

1. II. chirurgicka klinika fakulty vseobecneho lekarstvi Karlovy university v Praze, prednosta akademik J. Divis. As. dr. J.S., II. chirurgicka klinika, U nemocnice 2, Praha 2.

(LUNG NEOPLASMS, surgery,
bronchogenic cancer, remote results (Cz))

LHOTKA, J.; CHMEL, K.; FRIEDBERGER, V.; SMAT, V.; BOREK, Z.

Traumatic perforation of the esophagus. Rozhl.chir. 40 no.2-3:
147-149 Mr '61.

1. II.chirurgická klinika WL, prednosta doc.dr. J.Lhotka.
(ESOPHAGUS wds & inj)

SMAT, Vaclav

An unusually tortuous thoracic aorta. Rozhl. chir. 40 no.7:496-498
Jl '61.

1. II chirurgická klinika KU v Praze, prednosta doc. dr. J. Lhotka.

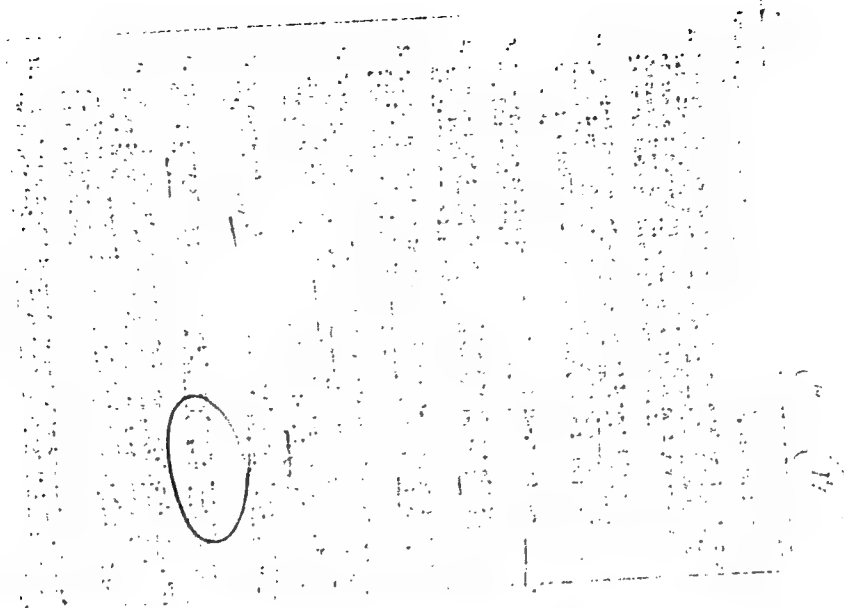
(AORTA abnorm)

SMAT, V.; POSPISIL, M.; VINCEKCOVA, B.

Some indications for surgical treatment of inflammations of the gall-bladder. Cesk. gastroent. vyz. 15 no.8:607-611 D '62.

1. II. chirurgická klinika v Praze, přednosta prof. dr J. Lhotka.
(CHOLECYSTECTOMY)

SINHT, V



MOTLIK, K.; JANOUSKOVA, H.; HRADEC, E.; SMAT, V.

Some macroscopic indices on the distribution of medulla in human adrenal glands (morphological contribution to the problem of so-called medullectomy). Rozh. chir. 43 no.4:233-242 Ap '64.

1. II. patologickoanatomicky ustav (prednosta prof. dr. V. Jedlicka)
a II. chirurgicka klinika (prednosta prof. dr. J. Lhotka) fakulty
vseobecneho lekarstvi KU [Karlova Universita] v Praze.

SMATANA, Anton, inz.

Modern methods of traction vehicle servicing at the locomotive
depots of the Czechoslovak Railways. Zel dop tech 11 no.3:80-81
'63.

SMATKOV, Ya.P., inzhener.

Scientific research and experimental construction in municipal
transportation. Ger. khos. Mosk. 30 no. 1: 18-21 Ja '56. (MIRA 9:6)
(Transportation)

SECRET

1. Monthly List of East European Accessions, Vol. 2, #3, Library of Congress, August 1953, Encl.

2. Monthly List of East European Accessions, Vol. 2, #3, Library of Congress, August 1953, Encl.

OPRCLT L. W. R. V. J. C. L. C. V.

AC. Soil humus problem. II. Amino-acid composition of the hydrolyzates of humic acids in different soil types. Lubomir Pavel, Jaroslav Koloušek and Václav Šmatlák (*Vysoká škola zemědělská, Prague*). *Sborník Českoslov. Akad. Zeměděl. Ved.* 27A, 207-12(1964); cf. C.A. 48, 7829h.—The qual. amino-acid compn. of the acid hydrolyzates of humic acids isolated from different soil types (chernozem, brown, and podzolic soils) was detd. by paper partition chromatography. The amino acids found were: cysteic acid, aspartic acid, glutamic acid, dihydroxyphenylalanine, serine, glycine, threonine, α-alanine, lysine, arginine, proline, valine, and methionine, methionine-sulfone, tyrosine (trace) and 2 not identified substances. The org. S of humic acids was estd. to be a structural element of cysteic acid and methionine. There was no difference in qual. amino acids compn. in different soil types. The amino acids in the acid hydrolyzates of humic acids show the polypeptide chain structure.

Jan Micka

(2)

SMATOV, Zh.

Species of bloodsucking midges (Culicoides) in the Ili River
basin. Trudy Inst. zool. AN Kazakh. SSR 22:205-207 '64.
(MIRA 17:12)

L 44805-66

ACC NR: AP6006152

(A)

SOURCE CODE: CZ/0078/65/000/010/0011/0011

INVENTOR: Soucek, Jiri (Engineer; Benesov u Prahy); Hapl, K. (Vlasim); Saus, F. (Benesov u Prahy); Skvor, J. (Engineer; Uvaly); Bezouska, V. (Pruhonice); Hrdlicka, J. (Prague); Pokorny, O. (Prague); Zavazal, Z. (Prague); Smetana, J. (Prague)

72
B

ORG: none

TITLE: (Thermal expansion compensator for semiconductor system) CZ Pat. No. PV 1827-64

SOURCE: Vynalez, no. 10, 1965, 11

TOPIC TAGS: electrode, semiconductor device, thermal expansion

ABSTRACT: The electrode of the housing of a semiconductor system which is vacuum (hermetically) tight secured by means of the electrical insulating part to the base housing forming the other electrode which has positioned inside it a channel or duct sealed from the outside to which is introduced inside the housing a positioned expansion member constituting an electrical connection between the electrode and the semiconductor system feature in the device described here. The electrodes protrude from the housing in such a way that to the expansion member fixed to it can be secured deformation electrodes from the outside and that a conductor can be attached to them

Card 1/2

TOPEKHA, Petr Pavlovich; KOVYZHENKO, V.V., otv. red.; SIAVZYUK,
O.L., red.

[Problems of the unity of the trade-union movement in modern
Japan] Voprosy edinstva profsoiuznogo dvizheniia v sovremen-
noi Iaponii. Moskva, Izd-vo "Nauka," 1964. 162 p.
(MIRA 17:4)

Smayevskiy, V. Ye.

USSR/ Physics - Luminescence

Card 1/1 Pub. 43 - 31/62

Authors : Klimovskaya, K. L.; Vishnevskiy, V. N.; and Smayevskiy, V. Ye.

Title : About the luminescence of hydrazide of triaminophthalic acid

Periodical : Izv. AN SSSR. Ser. fiz. 18/6, 694-695, Nov-Dec 1954

Abstract : The changes in chemoluminescence intensity were investigated during the oxidation of yellow and white triaminophthalic hydrazide with hydrogen peroxide and potassium ferricyanide in an alkaline medium. The effect of hydrogen peroxide concentrations in the medium of the luminescence intensity is explained. The phenomena observed during the luminescence of the white and yellow hydrazines are described.

Institution: The Iv. Franko State University, L'viv

Submitted :

ZABUGIN, F.D.; SMAYKINA, M.G. (Moskva)

Two cases of toxoplasmosis. Zhur. nevr. i psikh. 60 no.3:312-314
'60. (MIRA 14:5)

(TOXOPLASMOSIS)

ZABUGIN, F.D.; SMAYKINA, M.G. (Moskva)

Toxoplasmosis and its control. Fel'd. akush. 26 no.12: 24-27
D '61. (MIRA 14:12)

(TOXOPLASMOSIS)

SMAYKINA, M.G.

X-ray diagnosis of chronic forms of acquired toxoplasmosis.
Trudy TSIU 80:142-144 '69.

Methodology of X-ray examination of the skull in patients
with acquired toxoplasmosis. Ibid.:145-147 (MIRA 18:11)

ZABUGIN, F.D.; SMAYKINA, M.G.

Clinical aspects of acquired toxoplasmosis (chronic form).
Zhur. novr. i psikh. 62 no.3:413-416 '62. (MIRA 15:3)

1. Poliklinika Gosplana SSSR, Moskva.
(TOXOPLASMOSIS)

1. The first of the two main groups of the Soviet Union (USSR) is the Russian Federation (Russia). The second group is the other republics of the Soviet Union. (USSR 1991)

SMAYLIS, A. I., Cand Med Sci -- (diss) "Complications in Lung Operations (According to Data of the Inst of Surgery Acad Med Sci USSR)." Mos, 1957. 12 pp; 1 sheet of tables (Min of Health USSR, Central Inst for the Advanced Training of Physicians), 200 copies (KL, 48-57, 110)

- 74 -

SMAYLIS, A.I.; TSUKERMAN, B.M.

~~Diagnosis and therapy of pulmonary artery embolism.~~ [with summary
in English] Eksp. khir. 2 no.1:42-48 Ja-F '57 (MIRA 10:4)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir.-chlen-
korrespondent AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.
(PULMONARY EMBOLISM AND THROMBOSIS, exper.
diag. & surg. in dogs) (Rus)

KRAKOVSKIY, N.I., professor; SMAYLIS, A.I.

Complications of pulmonary surgery. Sov.med.21 no.2:3-6 P '57.
(MLRA 10:6)

1. Iz Instituta khirurgii imeni A.V.Vishnevskogo (dir. - chlen-
korrespondent Akademii meditsinskikh nauk SSSR prof. A.A.Vishnevskiy)
Akademii meditsinskikh nauk SSSR.

(LUNGS, surg.
compl., statist.)

SMAYLIS, A.I.

SMAYLIS, A.I.

Complications of lung surgery. Khirurgia 33 no.4:74-80 Ap '57.
(MLRA 10:7)

1. Iz 2-go otdeleniya (zav. - prof. G.V.Alipov) Instituta khirurgii
imeni A.V.Vishnevskogo AMN SSSR (dir. - chlen-korrespondent AMN SSSR
prof. A.A.Vishnevskiy)

(LUNGS, surg.

postop. compl., prev., diag. & surg.)

SMAYLIS, A.I.

Air embolism in pulmonary surgery. Sov. med. 23 no.3:63-66 Mar. '59.
(MIRA 12:4)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir. - deyatel'nyy
chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.
(PNEUMONECTOMY, compl.
air embolism (Rus))
(EMBOLISM, case reports,
post-pneumonectomy air embolism (Rus))

... .. OM-YLIS, all. Smailis,

... .. of eff-ive blood circulation. Sov. med, 28
no. 10:5-10 0 '65.

(MIRA 18-11)

1. Kafedra gospi'tal'noy terapii i gospi'tal'noy khirurgii
Sovetskogo meditsinskogo instituta, 2. Chlen-korrespondent
Sovetskoy Akademii Nauk.

SMAYLOV, V.P.

Forces arising in the process of forcing the head portion of
shields and pipelines into the ground. Vod. i san. tekhn. no.10:
19-26 0 '57. (MIRA 10:11)

(Tunneling)

AFANAS'YEV, I.B.; OVAKIMYAN, G.B.; YEREMINA, T.N.; VORONINA, I.B.;
SMAYE'S, L.K.; BEER, A.A.

Synthesis of diamines, dicarboxylic acids, and
chloro-substituted monocarboxylic acids based on telomers of
chlorobromomethane with ethylene. Khim.prom. no.10:709-712
0 '62. (MIRA 15:12)

(Amines)
(Acids, Organic)
(Polymers)

GILMAN, I.M.; STAYLIS, S.S.

Study of the electric sensitivity of eyes in school-age children
on the southern coast of the Crimea. Uch. zap. IGPI no.168:223-
226 '68. (MIRA 19:2)

SMAYSHKINA, K.G.

New species of Foraminifers in lower Cretaceous sediments of Daghestan. Trudy Geol.inst.Dag.fil. AN SSSR 1:82-91 '57. (MIRA 14:9)

(Daghestan--Foraminifera, Fossil)

SMAZAK, S.

"Using Highly Developed Agrotechnics in Plant Breeding." p. 160, Bratislava, Vol. 6, 1951.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

ACC NR: AP6021789

SCIENT. DATA: UR/0413/66/000/012/0052/0052

INVENTORS: Smazhovskaya, Ye. G.; Rivkin, V. I.; Podol'ner, N. A.

ORG: none

TITLE: A ceramic material. Class 21, No. 182779

SOURCE: Izobretoniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 52

TOPIC TAGS: ceramic material, ceramic technology, ceramic product property, piezo-electric ceramic, piezoelectric effect, piezoelectric property, potassium compound

ABSTRACT: This Author Certificate presents a ceramic material for producing piezo-electric elements and containing PbO , Bi_2O_3 , and TiO_2 . To increase the interval of working temperatures for the piezoelectric elements, aside from the above components, K_2O is introduced into this material. K_2O is added in the following molar proportion to the other ingredients:

$PbO : Bi_2O_3 : K_2O : TiO_2 = (1 - X) : \frac{X}{4} : \frac{X}{4} : 1$ at $X = 0.3 - 0.6$.

SUB CODE: 11,20/ SUBM DATE: 18Jun64

Card 1/1

UDC: 621.315.61:537.226.33

BRIGIDIANA, YE. I.

"Investigation of the Process of Hot Pressing Ceramic Articles Under Pressure."
In Higher Education USSR, Moscow: Order of Lenin Chemicotechnological Institute
G. I. Mendeleev, Moscow, 1955
(Dissertation for the Degree of Candidate of Technical Sciences)

SC: Khizhnaya Letopis', No. 6 Aug 55

24(3)

AUTHORS:

Rez. I. I. Smazhevskaya, Ye. G.,
Kachkacheva, K. M.

SOV/48-21-12-28/33

TITLE:

On the Problem of Piezoelectric Ceramics Production for High-Temperature Operations (K voprosu o poluchenii p'yezokeramiki dlya raboty pri povyshennykh temperaturakh)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958,
Vol 22, Nr 12, pp 1520-1525 (USSR)

ABSTRACT:

In the present paper the following compounds were obtained and their properties investigated: solid solutions of $(Ba,Ca)TiO_3$, $(Ba,Pb)TiO_3$, $(Ba,Ca,Pb)TiO_3$, $Pb(Ti,Zr)O_3$, lead niobate and solid solutions on the basis of the latter. Since in publications there are no details on $PbNb_2O_6$, a piezoelectric with the highest Curie (Kyuri) temperature (570°) and its formation conditions, this reaction was subjected to a complex thermographic investigation in the GIEKI at Kh. S. Valeyev's laboratory. G. A. Smolenskiy and V. A. Isupov offered suggestions as to the selection of compositions for producing piezoelectric ceramics on the basis of $PbNb_2O_6$. The principal experimental results are given in the

Card 1/1

On the Problem of Piezoelectric Ceramics Production for SOV/48-22-12-28/33
High-Temperature Operations

table. The analysis of the data obtained reveals that solid solutions on the basis of PbNb_2O_6 are the most appropriate compositions for electromechanical high-temperature transformers. Solid PbZrO_3 - PbTiO_3 solutions come next to them; however, considerable technical complications are involved in the production. Solid $(\text{Ba,Ca})\text{TiO}_3$ and $(\text{Ba,Ca,Pb})\text{TiO}_3$ solutions can be used in a subpolarization up to $120-130^\circ$. Solid $(\text{Ba,Pb})\text{TiO}_3$ solutions probably will not be suitable, unless the homogeneity of the material can be increased. Furthermore the low dielectric stability of these ceramics at polarization temperatures must be increased by means of a corresponding modification of the composition, i.e., by reduction of the conductivity loss that complicates the piezoelectric excitation of electromechanical transformers of this material. The authors express their gratitude to L. Z. Rusakov for valuable advice and to the cooperators of the TsNII P. L. B. Gernayze, A. P. Yermakova, A. V. Konstantinov, N. A. Podoliner, V. A. Rozitskiy and A. A. Filimonov for helpful assistance.

Card 2/3

*Report of the Scientific Piezoelectric
Council of Ministers, USSR*

85023

S/048/60/024/010/033/033
B013/B063

9,6180

AUTHORS: Kachkacheva, M. M., Dryabchuk, A. A., Rusakov, L. Z.,
Smazhevskaya, Ye. G. 21

TITLE: High-temperature Piezoelectric Acceleration Transmitters

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 10, pp. 1304-1306

TEXT: This article gives a description of a new acceleration transmitter. The sensitive element was made of the piezoceramic material $(\text{Pb}_{0.6}\text{Ba}_{0.4})\text{Nb}_2\text{O}_6$. A general view of the transmitter is shown in Fig. 1, its design is given in Fig. 2. Due to its compact design the transmitter stands an overload of up to 300 g. It weighs about 50 g, and has a sensitivity of 10 mv/g. The sensitivity for the transverse vibration component is 5 - 6% lower than the axial sensitivity. The frequency characteristics and the temperature dependence of sensitivity are illustrated in Fig. 3 and Fig. 4, respectively. Data for piezoelectric

Card 1/2

05800

9.2180(3203,1162)
24.7500(1043,1160)

S/048/60/024/011/024/036
B006/B060

AUTHORS: Smazhevskaya, Ye. G. and Podol'ner, N. A.

TITLE: Some Results of a Study of the $\text{PbO} - \text{Nb}_2\text{O}_5 - \text{Nd}_2\text{O}_3$ System

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 11, pp. 1394-1397

TEXT: This is the reproduction of a lecture delivered at the Third Conference on Ferroelectricity which took place in Moscow from January 25 to 30, 1960. The authors studied systems consisting of lead metaniobate and various metal oxides (oxides of Al , Zr , Ti , La , Sm , W , Ge , Er , Y , Dy , and Nd) at concentrations between 0.5 and 1 mole% with a view to stabilizing the seignettoelectric phase and to reducing the "seignettoelectric hardness" of PbNb_2O_6 (at the highest possible Curie temperature). Preliminary experiments showed that specimens with neodymium admixture exhibited a considerable piezoelectric effect, and these specimens were therefore examined most thoroughly. Specimens with 0.5, 1, 3, 4, 5, 7, and 10 mole% Nd_2O_3 were prepared and the

Card 1/3